

use well before the filing date of the present specification. Further, an internet search identified numerous other documents demonstrating the use by others of this cell line, and two examples of these documents are also attached as Exhibits 2 and 3. Thus, it is clear that researchers are well aware of this myeloma cell line and have been using it in a variety of research capacities well before the filing of this specification. Applicants respectfully request withdrawal of the rejection.

In the pending Office Action, the Examiner also recognized the deposit of the hybridoma cell line under Accession No. DSM ACC2286, but requested an affidavit or declaration in order to fully comply with 37 CFR 1.803-1.809. Enclosed is a Statement by Applicants' Attorney of Record to comply with this request.

The Examiner also alleged that the language "An antibody comprising a monoclonal antibody" from claims 18 and 19 was confusing. The currently requested amendments remove this language, and withdrawal of the rejection is requested.

Further, the Examiner asserted that the language "having an affinity of "X" against the epitope . . ." from claims 18 and 19 is contradictory. Applicants have amended the claims to demonstrate that the claimed antibodies have an affinity of a certain magnitude for SEQ. ID NO. 1. While the Applicants disagree with the Examiner's assertion that the previous language was contradictory, the claims as presently amended clarify the matter such that no confusion is present.

The Examiner also rejected claim 22 as "vague and indefinite" by the use of the term "under the No." Applicants have amended the claim to include the word "Accession" to clarify the claim.

Claim 23 currently stands rejected for its use of the term "high" in relation to affinity. Claim 23 has been amended to specify the degree of affinity required and clearly demonstrates the metes and bounds of the invention.

For these reasons, Applicants respectfully request entry of the amended claims and withdrawal of the rejections based upon §112.

Rejections based upon §§102 and 103:

Claims 18-19 stand rejected under §102(b) as anticipated by, or alternatively, under §103(a) as obvious over Hinds et al. (J. Med. Chem., V. 34, No. 6, pp. 1777-1789 (1991)). Further, claims 18-21 and 23-25 stand rejected under §103(a) as obvious over Hinds et al. in view of Kuby (Immunology, 2nd Ed., W.H. Freeman and Co., pp. 160-164 (1994)). Applicants respectfully disagree with these rejections and request reconsideration in light of the requested amendments.

According to Hinds et al., a 19 amino acid-containing haemagglutinin peptide was used as an immunogen for raising monoclonal antibodies (see p. 1783, col. 2). In the claims as presently amended, a 13- or 14- amino acid peptide is used for raising the antibodies; thus, Hinds et al. does not anticipate the present invention.

Moreover, the affinity of the monoclonal antibodies DB19/1 and DB19/25 described in that reference is much lower than the mAb's of the present invention. The dissociation constants for DB19/1 and DB19/25 are approximately 1.8×10^{-7} M and 1.8×10^{-8} , respectively (Table IV, p. 1784). These dissociation constants correspond to affinity constants of $0.55 \times 10^6 \text{ M}^{-1}$ and $0.55 \times 10^7 \text{ M}^{-1}$, respectively. As such, these antibodies do not anticipate the presently claimed antibodies as they do not have the specified affinity.

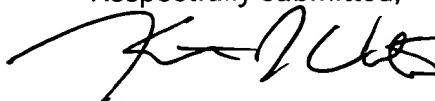
Further, neither Hinds by itself or in combination with the Kuby reference render the present invention obvious. Neither the Hinds or Kuby references demonstrate the steps necessary to obtain an antibody with the required affinity of the claimed antibodies. Quite simply, Hinds et al. does not even suggest that antibodies of higher affinity than DB19/1 and DB19/25 are either obtainable nor desirable. Thus, the Hinds reference cannot render the present invention obvious when standing alone. Further, the fact the Hinds reference makes no suggestion as to the obtainability or desirability of such higher affinity antibodies clearly demonstrates that there is no motivation given to combine the cited references.

Further, the Kuby reference simply discloses the manner of making hybridomas generally, but does not teach how to obtain hybridomas that form antibodies having the required affinity as those claimed in the present invention.

Thus, even if the Hinds et al. reference is combined with the teaching of the Kuby reference, the combination still fails to lead to the present invention as claimed.

For these reasons, Applicants believe the claims as amended are free of the cited art. Applicants respectfully request allowance of the amended claims.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'K. Waite', written over a horizontal line.

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